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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,747	11/25/2003	Charles E. Narad	42P17968	7304

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EXAMINER	
CHRISTENSEN, SCOTT B	

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/722,747	NARAD, CHARLES E.	
	Examiner	Art Unit	
	Scott Christensen	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 19 is objected to because of the following informalities: "The method of claim 16" is followed by two commas. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucher in US Patent number 6,434,620 B1.

A. With regard to claim 1, Boucher discloses a network interface comprising: circuitry to receive and transmit network data (Boucher: Abstract. The INIC and CPD works with a host computer for data communication); a direct memory access unit (Boucher: Column 8, lines 32-38); circuitry to maintain at least one statistic metering operation of the network interface (Boucher: Column 44, lines 20-23. As the INIC has the exact values for certain statistics, circuitry must exist to maintain the statistic); circuitry, operationally coupled to the direct memory access unit, to initiate direct memory access transfer of at least one of the at least one statistic metering operation of the network interface (Boucher: Column 63, lines 17-43. The Utility CPU utilizes DMA,

and the Utility CPU is responsible for requests of statistics –Boucher: Column 56, lines 27-33).

B. With regard to claims 16 and 26, Boucher discloses a method and a program comprising maintaining statistics at a network interface metering operation of the network interface (Boucher: Column 44, lines 20-23. As the INIC has the exact values for certain statistics, circuitry must exist to maintain the statistic), and transferring by direct memory access from the network interface to a memory accessed by at least one processor at least one of the statistics metering operation of the network interface (Boucher: Column 63, lines 17-43. The Utility CPU utilizes DMA, and the Utility CPU is responsible for requests of statistics –Boucher: Column 56, lines 27-33).

C. With regard to claim 34, Boucher discloses a system comprising:

(1) At least one processor (Boucher: Column 3, lines 28-43);

(2) Memory operationally coupled to the at least one processor (Boucher: Column 61, lines 14-30);

(3) A network interface comprising: circuitry to receive and transmit data over a network connection (Boucher: Column 6, line 60 to column 7, line 10); a direct memory access unit operationally coupled to the memory (Boucher: Column 8, lines 32-38); circuitry to maintain statistics metering operation of the network interface (Boucher: Column 44, lines 20-23. As the INIC has the exact values for certain statistics, circuitry must exist to maintain the statistic); circuitry operationally coupled to the direct memory access unit to initiate direct memory access transfer of multiple ones of

the statistics metering operation of the network interface (Boucher: Column 63, lines 17-43. The Utility CPU utilizes DMA, and the Utility CPU is responsible for requests of statistics –Boucher: Column 56, lines 27-33); the statistics comprising at least one of the following: a number of packets received by the interface, a number of bytes received by the interface, a number of packets transmitted by the interface, and a number of bytes transmitted by the interface (Boucher: Column 56, lines 51-63).

D. With regard to claims 2, 18, and 28, Boucher further discloses that at least one statistic comprises at least one of the following: a number of packets received by the interface, a number of bytes received by the interface, a number of packets transmitted by the interface, and a number of bytes transmitted by the interface (Boucher: Column 56, lines 51-63).

E. With respect to claim 3, Boucher further discloses circuitry to include a timestamp with the direct memory access transfer of the at least one statistic (Boucher: Column 67, lines 13-26).

F. With respect to claim 4, Boucher discloses circuitry to include a sequence count with the direct memory access transfer of the at least one statistic, the sequence count distinguishing different sets of the at least one statistic (Boucher: Column 57, lines 6-12. As each DMA transfer is an event, the count can distinguish between different sets of the same statistic).

G. With respect to claim 5, Boucher discloses that the at least one statistic comprises at least one statistic derived from multiple packets (Boucher: Column 56,

lines 41-50. Successful transmits and receives, transmit and receive errors, and transmit collisions are cumulative statistics derived from the transmission of multiple packets.).

H. With regard to claim 6, Boucher discloses circuitry that is operationally coupled to the direct memory access unit to initiate direct memory access transfer of received network data (Boucher: Column 8, lines 30-37).

I. With regard to claim 7, Boucher discloses that the network interface comprises a framer (Boucher: Column 56, lines 18-26. To send and receive frames, there must be a framer to create the frames).

J. With regard to claim 8, Boucher discloses that the network interface comprises a Media Access Controller (MAC) (Boucher: Figure 21, MAC-A to MAC-D).

K. With regard to claim 9, Boucher discloses that the network interface comprises a PHY (Boucher: Column 77, lines 6-15).

L. With regard to claims 10 and 35, Boucher discloses circuitry to configure the circuitry to initiate direct memory transfer (Boucher: Column 60, lines 53-59).

M. With regard to claim 11, Boucher discloses that the circuitry to configure comprises circuitry to respond to at least one of the following: a request to transfer at least one of the at least one statistics (Boucher: Column 63, lines 24-30), an indication of at least one time to initiate a transfer, at least one indication of at least one statistic to transfer, an indication of at least one time to initiate a transfer, at least one indication of at least one statistic to transfer, an indication of the location in memory in which to transfer the at least one statistic, and a schedule of statistic transfers.

N. With regard to claim 12, Boucher discloses that the circuitry to configure comprises at least one register (Boucher: Column 56, lines 27-33).

O. With regard to claims 13 and 36, Boucher discloses that the circuitry to configure comprises circuitry to determine configuration information from received packets (Boucher: Column 21, line 64 to column 22, line 10. As the CCB is identified, circuitry is present to determine configuration information from received packets. CCB is defined in column 7, lines 22-30.).

P. With regard to claim 14, Boucher discloses that the circuitry to determine configuration information from received packets comprises circuitry to intercept packets traveling along a transmit path (Boucher: Column 36, lines 14-20).

Q. With regard to claims 15, 25, and 33, Boucher discloses that the direct memory access unit comprises circuitry to notify a processor of completion of a transfer (Boucher: Column 90, line 64 to column 91, line 12).

R. With regard to claims 17 and 27, Boucher discloses transferring packets from the network interface to the memory by direct memory access (Boucher: Column 63, lines 18-20. The term frame is interpreted as being synonymous with packet.).

S. With regard to claims 19, 29, and 38, Boucher discloses transferring at least one of a timestamp and a sequence number with the at least one of the statistics (Boucher: Column 67, lines 13-26).

T. With regard to claim 20, Boucher discloses that the network interface groups digital bits into frames (Boucher: Column 56, lines 18-26. To send and receive frames, there must be a way to group digital bits into frames).

U. With regard to claims 21 and 30, Boucher discloses configuring the transfer of at least one of the statistics (Boucher: Column 60, lines 53-59).

V. With regard to claims 22 and 31, Boucher discloses configuring at least one of the following: at least one subset of the statistics to transfer, at least one time to initiate a transfer, and at least one memory location to receive transferred data (Boucher: Column 84, lines 52-61).

W. With regard to claim 23, Boucher discloses receiving a packet at the network interface (Boucher: Column 1, lines 40-42) and configuring based on data included in the packet (Boucher: Column 21, line 64 to column 22, line 10. As the CCB is identified, circuitry is present to determine configuration information from data within received packets. CCB is defined in column 7, lines 22-30.).

X. With regard to claim 24, Boucher discloses that transferring into the memory comprises transferring into a cache memory of at least one of the at least one processor (Boucher: Column 61, lines 14-30).

Y. With regard to claim 32, Boucher discloses instructions for configuring the transfer based on contents of a received packet (Boucher: Column 21, line 64 to column 22, line 10. As the CCB is identified, circuitry is present to determine configuration information from the contents of received packets. CCB is defined in column 7, lines 22-30.).

Z. With regard to claim 37, Boucher discloses circuitry, operationally coupled to the direct memory access unit, to initiate transfer of packets received via the network

connection (Boucher: Column 63, lines 18-20. The term frame is interpreted as being synonymous with packet.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Christensen whose telephone number is (571) 270-1144. The examiner can normally be reached on Monday through Thursday 6:30AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on (571) 272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SBC

Frantz F. Jules
Supervisory
Patent Examiner